

Applicant Name Gallatin County / Hebgen Lake Estates RID 322
Project Name Hebgen Lake Estates Wastewater Improvements

Project Abstract

Hebgen Lake Estates is on the southern shore of Hebgen Lake just five miles north of West Yellowstone. The community consists of 183 households and is served by a small sewer collection system with a lift station that pumps raw wastewater to a single-cell aerated lagoon, with effluent to groundwater by infiltration cells. The existing lagoon leaks over 2 million gallons of wastewater annually, the aeration does not work, and the nearby monitoring wells demonstrate the presence of nitrates in the groundwater in excess of the state water quality standard of 10 mg/l. This is also a federal and state drinking water standard. The lift station is more than 20 years old and has failed once, resulting in raw sewage overflows on the ground within the community. Because of the condition of existing facilities and the exceedance of the groundwater quality standard in a monitoring well, the Montana Department of Environmental Quality (DEQ) issued a violation letter to Gallatin County in 2003. A consent order was negotiated between Gallatin County and DEQ in November 2005, and a strict compliance plan and schedule have been developed that call for compliance by October 2008.

After detailed analysis of all available alternatives, it was apparent that rehabilitation of the existing facilities would not allow compliance and that construction of new facilities was necessary. The preferred alternative is aerated wastewater treatment lagoons, followed by storage ponds with effluent disposal by irrigation on crops. This solution will completely solve the problem by significantly reducing the pollution of groundwater resources and will result in compliance with the DEQ order. Total project cost is \$2.77 million.